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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/749,879 | 12/31/2003 | Michael E. Browne | POU920030116US1 | 8880 |
| 46369 7590 12/19/2007 HESLIN ROTHENBERG FARLEY & MESITI P.C. 5 COLUMBIA CIRCLE ALBANY, NY 12203 | | | EXAMINER CABUCOS, MARIE G | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/749,879

Applicant(s)

BROWNE ET AL.

Examiner

Marie Antoinette Cabucos

Art Unit

2163

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 8-20 are rejected under 35 U.S.C. 102(b) as being unpatentable by Gregory Tad Kishi (US Patent no. 6,163,773).

2. Regarding claims 8 and 15, Kishi discloses in figures 1 and 4-8 a request management system comprising a computer environment (figure 1); means for receiving by a request manager (104) of the computer environment a first request (col. 2, lines 45-67; figure 4; e.g. "last access of triggered file") from a requester (102), the first request associated with meta data (110, e.g. "dataset access log"), said meta data corresponding to data (106) maintained separately from the meta data by a data object manager (col. 4, lines 35-51, e.g. "storage controller") of a storage subsystem of the computer environment; means, responsive to receipt of the first request (last access) at the request manager, for automatically informing, by the request manager, the data object manager of an anticipated, second request (406) to be subsequently received by the data object manager from the requester to enable the data object manager to prepare for the anticipated second request, wherein the anticipated, second request to be received by the data object manager is at least partially ascertainable from meta data (col. 8, lines 50-60; e.g. "past data characteristics") associated with the first request

received by the request manager (figure 4; col. 8, lines 40-60); and wherein the data object manager prepares for the anticipated, second request by adjusting utilization of a cache of the computer environment based on information derived from the meta data associated with first request by the request manager before the anticipated, second request is received at the data object manager from the requester (col. 9, line 7 to col. 10, line 5; e.g. training neural network 109).

3. Regarding claims 9, 13, 16 and 20, Kishi discloses the system of claim 8, wherein the data object manager prepares for the anticipated, second request, by at least one of pre-fetching into the cache data required by the anticipated, second request, thereby reducing data access latency, or moving data from the cache to a disk of the storage subsystem, thereby facilitating receipt of data at the cache (col. 11, lines 30-49); and wherein said pre-fetching comprises means for pre-fetching one or more data blocks from one or more storage media of the data storage subsystem whereby the data blocks are stored in the cache, the data blocks comprising at least some of the data (col. 11, lines 57-65; step 714).

4. Regarding claims 10, 11, 17 and 18, Kishi discloses the system of claim 8, wherein said preparing comprises means for managing contents of a cache in a data storage subsystem: wherein the data object manager prepares for the anticipated, second request by noting that data associated with the anticipated, second request is not to be cached (col. 12, lines 11-60; expiration of the dataset access log entry); and wherein the data object manager prepares for the anticipated second request by managing the requester's access to the data (col. 8, lines 25-39).

5. Regarding claims 12 and 19, Kishi discloses the system of claim 8, further comprising means for sending, by the request manager, a reply to the requester in response to the first request (datasets' previous access) substantially simultaneously with informing the data object manager of the anticipated, second request (event trigger) to be received; and means for thereafter receiving, by the data object manager, the second request from the requester, wherein said preparing (training) by the data object manager begins before the data object manager receives the anticipated, second request (col. 2, line 45 to col. 3, line 12).

6. Regarding claim 14, Kishi discloses the system of claim 8, wherein the preparing by the data object manager comprises means for releasing storage locations of the cache whereby the storage locations become available for storing other data (figure8).

Response to Arguments

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Pertinent Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Prior art of record to Bendert et al (US Patent no. 5,761,678) discloses creation of clone storage area with identification of base storage area and deferred cloning of metadata.

Prior art of record to Gladney et al (US Patent no. 6,044,373) discloses an object-oriented access control method and system for military and commercial file systems.

Prior art of record to Paul Mundy (US Patent no. 6,256,645) discloses a storage manager which sets the size of an initial-free area assigned to a requesting application according to statistical data.

Prior art of record to Degenaro et al (US Patent no. 6,654,766) discloses a system and method for caching sets of objects.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marie Antoinette Cabucos whose telephone number is 571-272-8582. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don K. Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Marie Antoinette Cabucos
Examiner
Art Unit 2163


DON WONG
SUPERVISORY PATENT EXAMINER
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